AMENDMENT TO THE CLAIMS

1. (Currently Amended) An equine dental apparatus for floating the teeth of horses comprising:

a tool body;

a drive shaft disposed along a first axis inside of the tool body, wherein the drive shaft includes a first end configured for attachment to a drive mechanism and a second end opposite the first end; and

a grinding member connected to the second end and partially housed in the tool body, wherein when the tool body is held in a fixed position with the drive shaft oriented horizontally, the grinding member is capable of pivoting upward through a first range of angles relative to the drive shaft and is further capable of pivoting downward through a second range of angles relative to the drive shaft.

2. (New) The equine dental apparatus of claim 1 wherein the tool body includes a pivot joint having a pivot axis, and further wherein the grinding member pivots through the range of angles about the pivot axis.

3. (New) The equine dental apparatus of claim 2 wherein the pivot axis is perpendicular to the first axis.

4. (New) The equine dental apparatus of claim 2 wherein the pivot axis intersects the first axis.

5. (New) The equine dental apparatus of claim 2 wherein the drive shaft includes a first section disposed to rotate about the first axis, a second section disposed to

rotate about a second axis, and a ball and socket joint disposed to couple the second section to the first section, wherein the ball and socket joint is disposed inside of the pivot joint.

6. (New) The equine dental apparatus of claim 2 wherein the apparatus further comprises a vacuum port disposed to suction enamel dust produced during the floating of teeth, wherein the vacuum port passes through the pivot joint.

7. (New) The equine dental apparatus of claim 2 wherein the apparatus further comprises a source of illumination disposed to illuminate the teeth being floated, wherein the source of illumination passes through the pivot joint.

8. (New) The equine dental apparatus of claim 7 wherein the source of illumination includes a cable, wherein the cable passes through the pivot joint.

9. (New) The equine dental apparatus of claim 8 wherein the cable is a fiber optic cable.

10. (New) The equine dental apparatus of claim 1 wherein the apparatus further comprising a vacuum port disposed to suction enamel dust produced during the floating of teeth, wherein a portion of the vacuum port is disposed inside of the tool body.

11. (New) The equine dental apparatus of claim 1 wherein the apparatus further comprising a source of illumination disposed to illuminate the teeth being floated,

wherein the source of illumination is at least partially disposed inside of the tool body.

12. (New) The equine dental apparatus of claim 11 wherein the source of illumination includes a cable, wherein the cable is at least partially disposed inside of the tool body.

13. (New) The equine dental apparatus of claim 12 wherein the cable is a fiber optic cable.

14. (New) The equine dental apparatus of claim 1 further comprising the drive mechanism.

15. (New) The equine dental apparatus of claim 1 wherein the apparatus is configured for attachment to an external vacuum source, and further wherein the apparatus is configured to provide vacuum suction from the external vacuum source to the vicinity of the grinding member to suction material produced during the floating of teeth.

16. (New) The equine dental apparatus of claim 15 further comprising the external vacuum source.

17. (New) The equine dental apparatus of claim 1 wherein the apparatus is configured for attachment to an external light source, and further wherein the apparatus is configured to provide light from the external light source to the vicinity of the grinding member.

18. (New) The equine dental apparatus of claim 17 further comprising the external light source.

19. (New) An equine dental apparatus for floating the teeth of horses comprising:

a first drive shaft disposed along a first axis and configured for attachment to a drive mechanism;

a second drive shaft coupled to the first drive shaft, wherein the second drive shaft pivots relative to the first drive shaft about a second axis different from the first axis, wherein the second axis intersects the first axis; and

a grinding member attached to the second drive shaft.

20. (New) The equine dental apparatus of claim 19 further comprising:

a first housing member, wherein the first drive shaft is at least partially disposed inside of the first housing member;

a second housing member, wherein the second drive shaft is at least partially disposed inside of the second housing member; and

a pivot joint connecting the second housing member to the first housing member, wherein the pivot joint pivots about the second axis to allow the second housing member to pivot relative to the first housing member.

21. (New) The equine dental apparatus of claim 20 wherein the apparatus further comprises a vacuum passageway disposed to suction enamel dust produced during the floating of teeth, wherein the vacuum passageway passes through the pivot joint.

22. (New) The equine dental apparatus of claim 20 wherein the apparatus further comprises a source of illumination disposed to illuminate the teeth being floated, wherein the source of illumination passes through the pivot joint.

23. (New) The equine dental apparatus of claim 22 wherein the source of illumination includes a cable, wherein the cable passes through the pivot joint.

24. (New) The equine dental apparatus of claim 23 wherein the cable is a fiber optic cable.

25. (New) The equine dental apparatus of claim 20 wherein the apparatus further comprises a vacuum passageway disposed to suction enamel dust produced during the floating of teeth, wherein a portion of the vacuum passageway is disposed inside of the first and second housing members.

26. (New) The equine dental apparatus of claim 20 wherein the apparatus further comprises a source of illumination disposed to illuminate the teeth being floated, wherein the source of illumination is at least partially disposed inside of the first and second housing members.

27. (New) The equine dental apparatus of claim 26 wherein the source of illumination includes a cable, wherein the cable is at least partially disposed inside of the first and second housing members.

28. (New) The equine dental apparatus of claim 27 wherein the cable is a fiber optic cable.

29. (New) The equine dental apparatus of claim 19 wherein the apparatus is configured for attachment to an external vacuum source, and further wherein the apparatus is configured to provide vacuum suction from the external vacuum source to the vicinity of the grinding member to suction enamel dust produced during the floating of teeth.

30. (New) The equine dental apparatus of claim 29 further comprising the external vacuum source.

31. (New) The equine dental apparatus of claim 19 wherein the apparatus is configured for attachment to an external light source, and further wherein the apparatus is configured to provide light from the external light source to the vicinity of the grinding member.

32. (New) The equine dental apparatus of claim 31 further comprising the external light source.

33. (New) The equine dental apparatus of claim 19 further comprising the drive mechanism.

34. (New) The equine dental apparatus of claim 19 wherein the second axis is perpendicular to the first axis.

35. (New) An equine dental apparatus for floating the teeth of horses comprising:

a drive shaft configured for attachment to a drive mechanism, wherein the drive shaft includes a first section disposed along a first axis and a second section coupled to the first section, wherein the

second section pivots relative to the first section about a second axis different from the first axis, wherein the second axis intersects the first axis; and

a grinding member attached to the second section.

36. (New) The equine dental apparatus of claim 35 wherein the second axis is perpendicular to the first axis.

37. (New) An equine dental apparatus for floating the teeth of horses comprising:

a first tool body member;

a second tool body member;

a drive shaft having a first section at least partially disposed inside of the first tool body member and a second section at least partially disposed inside of the second tool body member, wherein the second section is coupled to the first section, and further wherein the first section is disposed to rotate about a first axis;

a grinding member connected to the second section of the drive shaft and at least partially disposed inside of the second tool body member; and

a pivot joint connecting the first tool body member to the second tool body member, wherein when the first tool body member is held in a fixed position such that the first axis is horizontal, the second tool body member is capable of pivoting upward through a first range of angles relative to the first tool body member and is further capable of pivoting downward through a second range of angles relative to the first tool body member.

38. (New) The equine dental apparatus of claim 37 wherein the pivot joint further includes a ball and socket joint disposed between the first tool body member and the second tool body member.

39. (New) The equine dental apparatus of claim 38 wherein the ball and socket joint couples the second section of the drive shaft to the first section of the drive shaft.